

ABSTRACT OF THE DISCLOSURE

A micro-sample prepared by processing with an ion beam is extracted by a probe and, in this state, a voltage is applied across the probe and a micro-sample holder by a circuit for sending electric current to probe. Thereafter, a probe driver is moved by a probe position controller to cause a portion of the probe distanced from the tip thereof by about 5 μm toward the root side thereof to approach an end surface of an ear portion of the micro-sample holder, so that the probe and the micro-sample holder are fixed together at a bonding point by current welding. Then, by cutting a root-side portion, relative to the bonding point, of the probe using an ion beam, fixation of the micro-sample to the micro-sample holder via the tip of the probe is completed.